

REMARKS

In the Office Action, claims 1-5, 8-19 and 44-46 stand rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent No. 5,633,939 to Kitani et al. ("Kitani"), claim 50 is rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent No. 6,549,587 to Li ("Li") and claim 74 is rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 6,195,438 to Yumoto et al. ("Yumoto"),

In the Office Action, claims rejected under 35 U.S.C. §103(a) include claim 6 which is rejected as allegedly being unpatentable over Kitani in view of U.S. Patent No. 6,324,229 to Browder ("Browder"), claim 7 which is rejected as allegedly unpatentable over Kitani in view of Browder and further in view of U.S. Patent No. 4,947,133 to Thomas ("Thomas"), claims 20-23 and 25-26 which are rejected as allegedly unpatentable over Kitani in view of U.S. Patent No. 4,628,526 to Germer ("Germer"), and claim 24 which is rejected as allegedly unpatentable over Kitani in view of Germer and further view of U.S. Patent No. 5,444,788 to Orban ("Orban").

In the Office Action, claims rejected under 35 U.S.C. §103(a) also include claims 47-49 which are rejected as allegedly being unpatentable over Kitani in view of U.S. Patent No. 4,376,916 to Glaberson ("Glaberson"), claims 50-73 and 75-82 which are rejected as allegedly unpatentable over U.S. Patent No. 5,832,097 to Armstrong et al. ("Armstrong") in view of U.S. Patent No. 5,457,811 to Lemson ("Lemson").

The Office Action indicates that claims 83-99 include allowable subject matter. Claims 27-43 are withdrawn from consideration. In this response, claims 1, 5, 83 and 90 are amended. Upon entry of the amendments, claims 1-25, 44-46 and 48-101 will be pending in the application. Applicant incorporates by reference the arguments presented in response to prior Office Actions.

Examiner Interview

Applicant thanks the Examiner for the courtesies extended during the telephonic interview with Karl Bizjak (inventor) and the undersigned on June 20, 2007. In the interview, the relevance of Kitani was discussed including a review of the claims as contrasted with various drawings – in particular with Figs. 4 and 5 – and potential claim amendments to further distinguish the presently claimed inventions from Kitani.

Applicant explained the performance benefits obtained by the invention and stressed that Kitani does not teach all of the claimed elements. Specifically, Applicant explained that Kitani provides no method or suggestion of synchronizing a gain signal with an input signal. Kitani merely shows synchronization of an up/down counter 16 with a system clock scaled by counter 19. The output of counter 16 is used to set a gain of gain cell 11, but gain cell 11 includes no synchronizing logic or function. In response to a question by the Examiner, Applicant explained that the direction of counting on the Kitani up/down counter 16 is controlled by comparator 15 that compares a power level measured in the input signal (using low pass filter 14) with a threshold value reflective of the gain provided by up/down counter 16. Thus, the Kitani gain is synchronized only to a system clock and is not synchronized to the input signal or any predetermined event in the input signal.

Proposed Claim Amendments

Applicant submits certain claim amendments in this response. These amendments are submitted to clarify certain elements of the claims identified as potentially unclear by the Examiner in the Office Action and the interview. Claim 1 is amended to require *inter alia* an input detector for detecting a predetermined condition of the input signal and gain calculate logic responsive to the input signal and the input detector for generating a gain signal that includes a gain value. (N.B. similar input detection logic limitations that were previously recited in claim 5 are deleted in this amendment). Furthermore, the required synchronizing logic is responsive to the gain signal with the input detector and synchronizes the input signal and the gain signal to provide an output signal. Kitani does not teach or suggest the input detector, a predetermined condition in the input signal or the synchronizing logic as recited. Applicant believes the claims as previously presented were also allowable and reserves the right to pursue the previously presented claims in a continuation application.

Further Discussion of the Claim Rejections

Applicant respectfully submits that the submitted amendments more clearly distinguish claims 1, 83 and 90 of the present application from the art of record.

Regarding claims 44-46 and 48-49, Kitani does not teach an input comprising a plurality of estimator signals and a first signal processing stage for processing the plurality of estimator signals. The Office Action suggests that Kitani teaches an estimator signal obtained from a low

pass filter 14 and that the output of the low pass filter is either a signal processing stage or processed by a signal processing stage. As discussed in the interview, however, Kitani calculates a gain by comparing the output power of an input signal with a threshold level to provide an up/down control signal for controlling a counter. Applicant respectfully submits that Kitani does not teach a signal processing stage for processing plural estimator signals. Applicants further submit that no combination of Kitani and Glaberson teaches demodulating, filtering, combining or selecting a preferred one of the plural signals. Nor would there be any motivation to demodulate, filter, combine or select a preferred one of the plural signals to control an up/down counter. Therefore, the rejections of claims 44-46 and 48-49 should be withdrawn.

Claim Objections

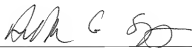
Applicant proposes amendments to claim 83 and 90 that remove the phrase “capable of.” Applicant respectfully submits that the objections should be removed in light of the amendments

CONCLUSION

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition of allowance and a Notice to that effect is earnestly solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,
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